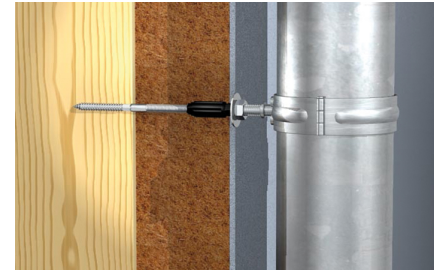
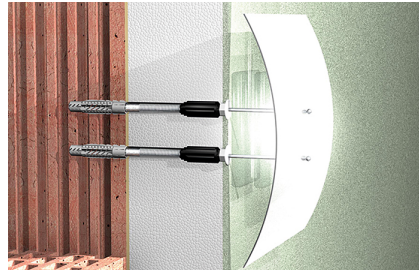


## The thermally separated stand-off installation in external thermal insulation composite systems (ETICS)



### BUILDING MATERIALS

- Concrete
- Vertically perforated brick
- Hollow blocks made from lightweight concrete
- Perforated sand-lime brick
- Solid sand-lime brick
- Building brick
- Aerated concrete
- Wood

### ADVANTAGES

- The stand-off installation allows for the fixture to be adjusted to the exact position required, whereby pressure marks and damage to the ETICS are avoided.
- The plastic cone creates a thermal barrier between the fixture and the inner fixture, and offers an energy-optimised fixing.
- The glass-fibre-reinforced plastic cone cuts its own way through the ETICS with a positive fit, and allows for a simple and fast installation without the need for any special tools.
- Combining Thermax 8 and 10 with the universal plug UX provides a secure anchoring in the substrate.
- Without UX plug direct mounting in wood substrate is possible after pre-drilling.

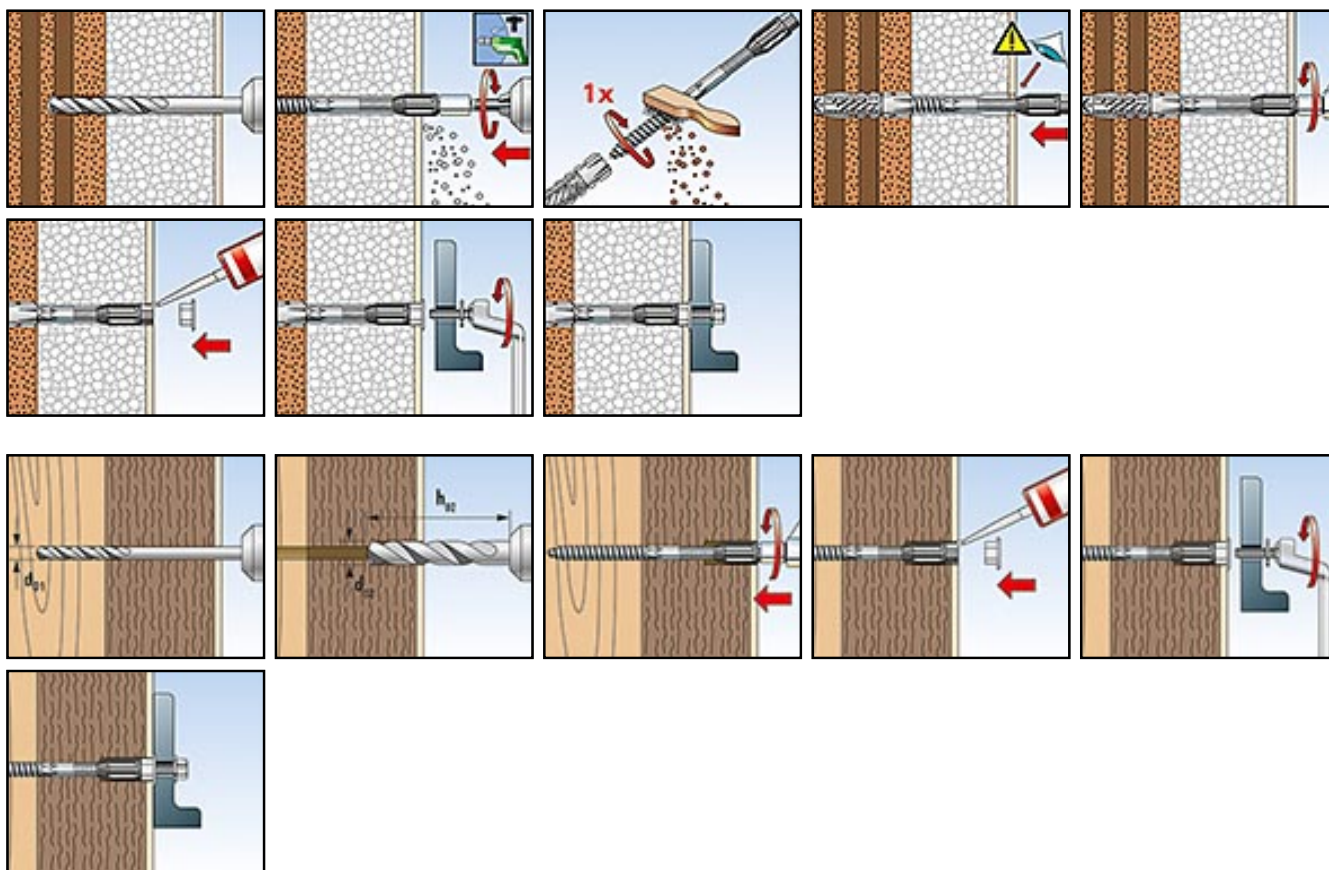
### APPLICATIONS

#### For the thermally separated fixing of:

- Signs
- Lighting
- Letter boxes
- Motion detectors
- Downpipes
- Lightning rods
- Blind guide rails

### FUNCTIONING

- The Thermax 8 and 10 systems are suitable for pre-positioned installation.
- The self-tapping, glass-fibre-reinforced cone cuts its own way through the plaster into the insulation during installation.
- The anti-cold cone uses a thermal barrier to minimise heat losses.
- Installation without any special tools.
- For use in wood without plug, the wood (footnote below load table) as well as the plaster has to be pre-drilled:  
Thermax 8:  
d02 = 14 mm, h02 = 50 mm;  
Thermax 10:  
d02 = 18 mm, h02 = 50 mm
- The extensive range features fitting options with metric screws (M6/8/10), sheet screws (6.3 mm), chipboard screws (6.0 mm) or chipboard screws (4.5 - 5.5 mm) when using an SX 5 expansion plug.

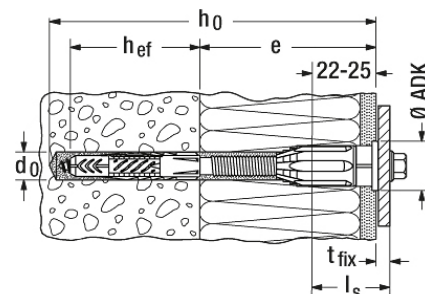


Frame fixings / Stand-off installation

## TECHNICAL DATA



Stand-off installation Thermax 8 / 10



Article name	Art.-No.	Drill hole diameter $d_0$ [mm]	Drill hole depth $h_0$ [mm]	Usable length $e$ [mm]	Anchorage depth $h_{ef}$ [mm]
<b>Thermax 8/60 M6</b>	<b>045685</b>	10	120	45 - 60	60
<b>Thermax 8/80 M6</b>	<b>045686</b>	10	140	60 - 80	60
<b>Thermax 8/100 M6</b>	<b>045687</b>	10	160	80 - 100	60
<b>Thermax 8/120 M6</b>	<b>045688</b>	10	180	100 - 120	60
<b>Thermax 8/140 M6</b>	<b>045689</b>	10	200	120 - 140	60
<b>Thermax 8/160 M6</b>	<b>045690</b>	10	220	140 - 160	60
<b>Thermax 8/180 M6</b>	<b>045691</b>	10	240	160 - 180	60
<b>Thermax 10/100 M6</b>	<b>045692</b>	12	160	80 - 100	70
<b>Thermax 10/120 M6</b>	<b>045693</b>	12	180	100 - 120	70
<b>Thermax 10/140 M6</b>	<b>045694</b>	12	200	120 - 140	70
<b>Thermax 10/160 M6</b>	<b>045695</b>	12	220	140 - 160	70
<b>Thermax 10/180 M6</b>	<b>045696</b>	12	240	160 - 180	70
<b>Thermax 10/200 M6</b>	<b>512605</b>	12	260	180 - 200	70
<b>Thermax 10/220 M6</b>	<b>514250</b>	12	280	200 - 220	70
<b>Thermax 10/240 M6</b>	<b>514251</b>	12	300	220 - 240	70
<b>Thermax 10/100 M8</b>	<b>045697</b>	12	160	80 - 100	70
<b>Thermax 10/120 M8</b>	<b>045698</b>	12	180	100 - 120	70
<b>Thermax 10/140 M8</b>	<b>045699</b>	12	200	120 - 140	70
<b>Thermax 10/160 M8</b>	<b>045700</b>	12	220	140 - 160	70
<b>Thermax 10/180 M8</b>	<b>514252</b>	12	240	160 - 180	70
<b>Thermax 10/200 M8</b>	<b>514253</b>	12	260	180 - 200	70

Article name	Art.-No.	Drill hole diameter $d_0$ [mm]	Drill hole depth $h_0$ [mm]	Usable length $e$ [mm]	Anchorage depth $h_{ef}$ [mm]
<b>Thermax 10/220 M8</b>	<b>514254</b>	12	280	200 - 220	70
<b>Thermax 10/240 M8</b>	<b>514255</b>	12	300	220 - 240	70
<b>Thermax 10/100 M10</b>	<b>045702</b>	12	160	80 - 100	70
<b>Thermax 10/120 M10</b>	<b>045703</b>	12	180	100 - 120	70
<b>Thermax 10/140 M10</b>	<b>045704</b>	12	200	120 - 140	70
<b>Thermax 10/160 M10</b>	<b>045705</b>	12	220	140 - 160	70
<b>Thermax 10/180 M10</b>	<b>514256</b>	12	240	160 - 180	70
<b>Thermax 10/200 M10</b>	<b>514257</b>	12	260	180 - 200	70
<b>Thermax 10/220 M10</b>	<b>514258</b>	12	280	200 - 220	70
<b>Thermax 10/240 M10</b>	<b>514259</b>	12	300	220 - 240	70

## LOADS

### Stand-off installation Thermax 8 and 10

Highest recommended loads<sup>1)</sup> of a single anchor in concrete and masonry.

Type		Thermax 8	Thermax 10
<b>Supplied type of plug for the anchorage in the base material</b>		<b>UX 10 x 60</b>	<b>UX 12 x 70</b>
<b>Recommended tensile loads in the respective base material <math>N_{rec}</math><sup>2)</sup></b>			
Concrete <sup>3) 4)</sup>	≥ C20/25 [kN]	1,00	1,00
Solid brick <sup>3) 4)</sup>	≥ Mz 12 [kN]	0,50	0,70
Perforated sand-lime brick <sup>3) 4)</sup>	≥ KSL 12 [kN]	0,60	0,80
Vertically perforated brick <sup>4)</sup>	≥ Hlz 12 [kN]	0,20	0,30
Aerated concrete <sup>3) 4)</sup>	≥ PB 4 [kN]	0,40	0,60
<b>Recommended shear load <math>V_{rec}</math>, valid für all above mentioned base materials for the stated insulation thickness</b>			
External Thermal Insulation Composite System <sup>5)</sup>	≤ 240 mm [kN]	0,15	0,20

<sup>1)</sup> Required safety factors are considered.

<sup>2)</sup> The drilling method is to be adapted to the building material used. As different joint qualities are possible, the given values only apply for installation in the brick.

<sup>3)</sup> The given recommended tensile loads apply for fastenings with metric screws. When using chipboard screws with diameter 6,0 mm they have to be reduced to 0,35 kN.

<sup>4)</sup> The given recommended tensile loads apply for fastenings with metric screws. When using a SX 5-plug chipboard screws with diameter 4,5 - 5,5 mm they have to be reduced to 0,1 kN.

<sup>5)</sup> Values are valid for an ETICS made from PS- respectively PU-rigid foam panels. Thickness of rendering minimum 6 mm.